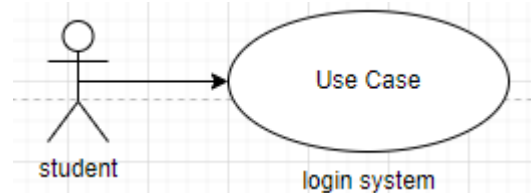Use case: login the system

Brief description

This Use case describes how student login or register the HKUST examination system.

Use-case diagram

Basic Flow

1. The use case begins when the student opens the application.
2. The system displays the login interface. It would show three options which are student login, teacher login and manager login.
3. The student selects student login.
4. The system displays the interface for student to enter login information.

    4.1. If the student has registered on the system

        {Logging In}

        4.1.1. The student enters his own username and password and select login

    4.2. If the student has not registered on the system

        4.2.1. The student selects register

        {Register}

        4.2.2. The system displays the interface for student to enter basic information including Username, Name, Gender, Age, Department and Password

        4.2.3. The student enters the required information

        4.2.4. The system stores the student's information in the database for login.

5. The use case ends.

Alternative Flows

A1: Invalid Login

At {Logging In}, if the password does not match the student's password stored in the database

1. The system notifies the student that the username or the password is incorrect.
2. The flow of events is resumed at {Logging In}.

A2: Username Not Found

At {Logging In}, if the entered username does not exist in the database,

1. The system notifies the student that the username is not found.
2. The flow of events is resumed at {Logging In}.

A3: Registration with Existing Username

At {Register}, if the student enters a username that is already stored I the database,

1. The system notifies the student that the username is already in use.
2. The flow of events is resumed at {Register}.

A4: Empty Fields

At {Logging In} or {Register}, if the student log in or register without entering required fields,
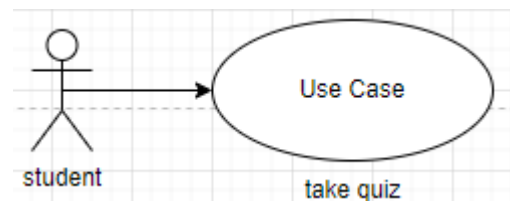
1. The system notifies the student to fill in all required fields.
2. The flow of events is resumed at {Logging In} or {Register}.

Use Case: Take Quiz

Brief Description

This use case describes how a student takes a quiz after logging in.

Use-case Diagram

Basic Flow

1. The use case begins when the student chooses a quiz to take after logging in the system.
2. The system displays the available quizzes.

{Select Quiz}

3. The student selects the desired quiz and clicks start.

{Quiz Begins}

4. The system retrieves and displays the quiz information including quiz name, number of questions, questions and timer.

{Completing Quiz}

5. The student answers the questions.

{Submit Quiz}

6. The student submits the quiz.

{Quiz Ends}

7. The system evaluates the quiz and displays the results.
8. The use case ends.

Alternative Flows

A1: Time Run Out

At any point between {Quiz Begins} and {Quiz Ends}, if the timer expires,

1. The system notifies the student that time's up for the exam.
2. The flow of events is resumed at {Quiz Ends}.

A2: Submit Incomplete Quiz

At {Submit Quiz}, if the student tries to submit the quiz without answering all required questions,

1. The system notifies the student that he has not answer all the questions.
2. The flow of events is resumed at {Completing Quiz}.

A3: Not Selecting Quizzes

At {Select Quiz}, if the student clicks start without selecting any quizzes.

1. The system notifies the student to select a quiz.
2. The flow of events is resumed at {Select Quiz}.

A4: Selecting Completed Quizzes

At {Select Quiz}, if the student selects the quiz he has completed before,

1. The system notifies the student to select a quiz that he has not completed it.
2. The flow of events is resumed at {Select Quiz}.

A5: Next

At {Completing Quiz}, if the student clicks Next button,

1. The system shows the next question.
2. The flow of events is resumed at {Completing Quiz}.

A6: Previous

At {Completing Quiz}, if the student clicks Previous button,

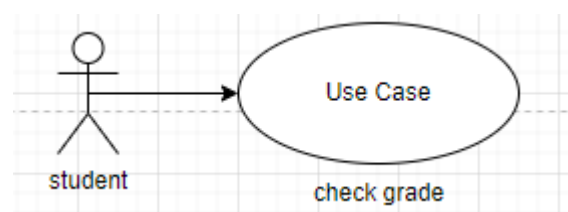3. The system shows the previous question.
4. The flow of events is resumed at {Completing Quiz}.

Use Case: Check Grade

Brief Description

This use case describes how a student checks their grades for completed quizzes.

Use-case Diagram

Basic Flow

1. The use case begins when the student selects Grade Statistic after logging in the system.

{Displaying Grade}

2. The system displays the grades interface which shows the grade and graph of quizzes the student has done.

{Select Course}

3. The student selects a course to view the grade and clicks Filter.
4. The system retrieves and displays the student's grade and graph for the selected course.

{End Displaying}

5. The use case ends.

Alternative Flows

A1: No Grades Available For Selected Course

At {Select Course}, If there are no grades available to display,

1. The system notifies the student that no grades are available for this course.
2. The flow of events is resumed at {Displaying Grade}.

A2: Reset

At any point between {Displaying Grade} and {End Displaying}, if the student clicks the reset button,

1. The system clears the selected course entry.
2. The flow of events is resumed at {Displaying Grade}.

A3: Refresh

At any point between {Displaying Grade} and {End Displaying}, if the student clicks the refresh button,

1. The system searches new completed quizzes and display them accordingly.
2. The flow of events is resumed at {Displaying Grade}.